

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P272051

Luminaire Tested: **22CZ2-44-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P272051  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44-S-UNV-L940-CD1-U  
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI  
Light Source: (98) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

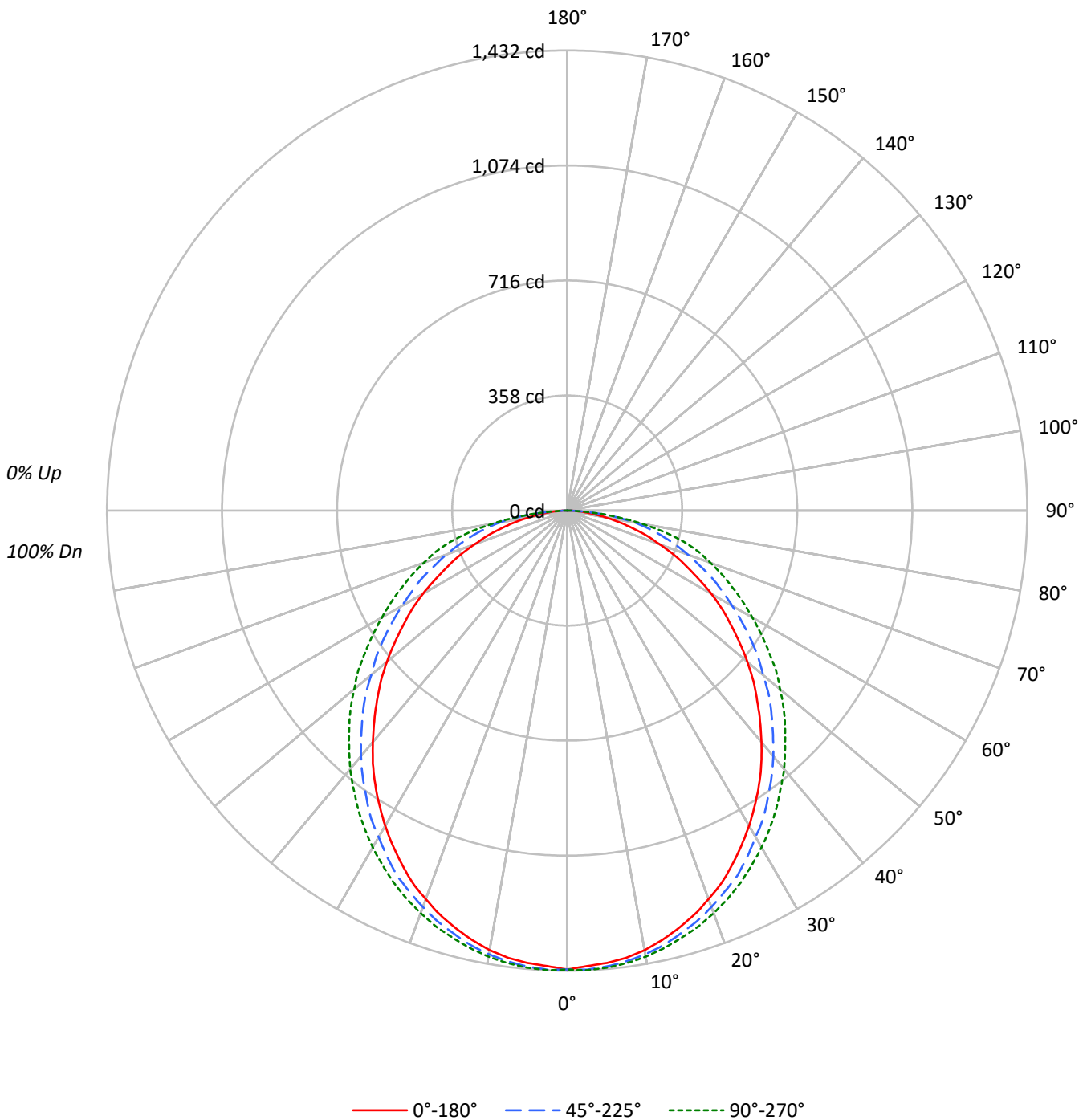
Lumens per Lamp: N/A  
Luminaire Lumens: 3985.0 lumens  
Efficiency: N/A  
Efficacy: 93.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 42.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3842	3842	3842
5°	3817	3847	3857
10°	3795	3831	3851
15°	3745	3797	3833
20°	3684	3759	3818
25°	3611	3721	3793
30°	3518	3645	3761
35°	3420	3579	3726
40°	3305	3507	3690
45°	3184	3425	3651
50°	3067	3332	3620
55°	2922	3271	3594
60°	2792	3192	3582
65°	2604	3173	3622
70°	2399	3146	3730
75°	2165	3190	3924
80°	1874	3285	3688
85°	1550	2754	2754



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.0	3.4
10°-20°	384.3	9.6
20°-30°	575.0	14.4
30°-40°	680.9	17.1
40°-50°	694.0	17.4
50°-60°	622.0	15.6
60°-70°	487.0	12.2
70°-80°	314.0	7.9
80°-90°	92.8	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1094.3	27.5
0°-40°	1775.3	44.5
0°-60°	3091.2	77.6
0°-90°	3985.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3985.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1428	1428	1428	1428	1428	
5°	1413	1417	1424	1426	1428	134
15°	1344	1352	1363	1374	1376	379
25°	1216	1227	1253	1270	1277	560
35°	1041	1054	1090	1123	1134	651
45°	837	855	900	946	959	646
55°	623	643	697	746	766	558
65°	409	433	498	547	569	406
75°	208	240	307	359	377	223
85°	50	69	89	89	89	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1427.9	1427.9	1427.9	1427.9	1427.9
2.5°	1418.7	1422.4	1429.8	1431.7	1431.7
5°	1413.1	1416.8	1424.2	1426.1	1427.9
7.5°	1403.8	1405.6	1414.9	1418.7	1420.5
10°	1388.9	1392.6	1401.9	1407.5	1409.4
12.5°	1368.5	1374.0	1385.2	1392.6	1394.5
15°	1344.3	1351.7	1362.9	1374.0	1375.9
17.5°	1318.3	1325.7	1340.6	1353.6	1357.3
20°	1286.6	1295.9	1312.7	1327.5	1333.1
22.5°	1255.0	1262.5	1282.9	1301.5	1307.1
25°	1216.0	1227.1	1253.2	1269.9	1277.3
27.5°	1175.1	1188.1	1214.1	1236.4	1243.9
30°	1132.3	1145.3	1173.2	1201.1	1210.4
32.5°	1087.7	1102.6	1136.0	1163.9	1173.2
35°	1041.2	1054.2	1089.6	1123.0	1134.2
37.5°	992.9	1004.0	1044.9	1080.3	1091.4
40°	940.8	955.7	998.4	1039.4	1050.5
42.5°	888.7	905.5	948.2	992.9	1004.0
45°	836.7	855.3	899.9	946.4	959.4
47.5°	786.5	801.4	851.6	896.2	914.8
50°	732.6	747.4	795.8	846.0	864.6
52.5°	676.8	697.2	749.3	797.6	820.0
55°	622.9	643.3	697.2	745.6	766.0
57.5°	572.7	589.4	645.2	695.4	715.8
60°	518.7	533.6	593.1	647.0	665.6
62.5°	461.1	483.4	544.8	595.0	617.3
65°	409.0	433.2	498.3	546.6	568.9
67.5°	360.7	383.0	446.2	498.3	522.5
70°	304.9	334.7	399.8	451.8	474.1
72.5°	260.3	286.3	353.3	405.3	429.5
75°	208.2	239.9	306.8	358.8	377.4
77.5°	165.5	197.1	260.3	301.2	310.5
80°	120.9	152.5	212.0	232.4	238.0
82.5°	81.8	111.6	152.5	158.0	159.9
85°	50.2	68.8	89.2	89.2	89.2
87.5°	24.2	27.9	31.6	29.7	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)